Neurocallis praestantissima in Costa Rica

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In 1904 Charles Wercklé, the French-Costa Rican gardener and collector, sent a depauperate specimen of *Neurocallis praestantissima* (Bory) Fée to Hermann Christ, who was then working on the Filicales for Durand and Pittier's "Primitiae Florae Costaricensis." Christ described the fern as a new species, *Pteris macrodictya* (Bull. Herb. Boiss. II, 7: 267. 1907), and related it to *P. haenkeana* Presl and to *P. podophylla* Swartz. He remarked that although the specimen was sterile and fragmentary, the uniqueness of the new species laid in the entire margins, coarsely reticulate venation, and herbaceous texture of the pinnae, and in the general resemblance of the plant to *Hemidictyum marginatum* Presl, a set of characters not found in any of the known species of *Pteris*.

Two months later, in his "Appendice aux Primitiae Costaricensis Filic. V." (Bull Herb. Boiss. II, 7: 585. 1907), Christ corrected his earlier publication and recognized that the Wercklé collection was actually the first continental record of N. praestantissima, described from the West Indies in 1845. This emendation was overlooked by Scamman (Rhodora 63: 205. 1961), who supposed that P. macrodictya Christ was P. grandifolia L. J. G. Baker made the same mistake as Christ did when he described and illustrated Pteris dominicensis Baker in Hooker (Ic. Pl. 3: 1642. 1886), an error later corrected by Jenman (Ferns Brit. West Ind. & Guian. [Misc. Inf. Bot. Dept. Trinidad 23] 118. 1900).

After the collection by Wercklé, who as usual did not cite a locality for his plant, Neurocallis was never again reported for Costa Rica. But during a recent field trip to Patillo, in the mountains ENE of Tapantí, Prov. Cartago, I located a large population of this fern (Gómez & Kennedy 3345, CR). The specimens were collected in a dense rain forest, where several species of Bolbitis, Cyathea, Diplazium, and Thelypteris were abundant.

The specimens showed a number of characters worth noting. In the material described by Fée and in the other specimens I have seen, the pinnae are either sessile or short-petiolulate (2–3 mm). All the Costa Rican material has petiolules ranging from 7 to 11 mm. In most Antillean collections the pinnae have moderately acuminate to almost obtuse apices. Most of the plants from Tapantí have long-acuminate pinnae, and some are close to being caudate. The rhizome, which has been described as paleate, is very short-creeping to suberect in our plants, and bears a very few, minute, rigid, narrow, reddish brown setae. The mature fertile pinnae are not linear, but rather wide, with medial to submarginal rows of sori parallel to the costa, which are protected by a wide, chartaceous, reflexed margin. In typical Neurocallis, the sporangia cover the entire surface, which accounts for the placing of this genus near Acrostichum.

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